# MANNHEIM AVENUE DUMP NEW JERSEY EPA ID# NJD980654180

## EPA REGION 2 CONGRESSIONAL DIST. 02

Atlantic County Galloway Township

Other Names: Lenox China, Inc.

#### Site Description

The 2-acre Mannheim Avenue Dump site is located in Galloway Township. The site was a landfill where approximately 300 drums (11,400 pounds) of degreasing sludge from Lenox China were disposed of in a 15-foot pit during the 1960s and, possibly, into the early 1970s. This waste was compacted into approximately 35 mounds and was covered with soil. Leaded waste, plaster molds, and china and clay forms also were mixed in with the mounded waste piles. An aquifer that provides the source of water for local residents lies 20 to 30 feet below the site. Approximately 1,300 area residents depend on shallow groundwater under the site for drinking water, the majority of which comes from private wells. A public school well is located in the vicinity of the site. The nearest residence is 1/10 mile from the site.

**Site Responsibility:** This site is being addressed through

Federal, State, and potentially responsible parties' actions.

#### **NPL LISTING HISTORY**

Proposed Date: 12/01/82 Final Date: 09/01/83

#### **Threats and Contaminants**





The underlying aquifer contains trichloroethylene (TCE) and toluene from the site disposal areas. Soil was contaminated with TCE and lead. During a 1993 soil sampling event, TCE was not detected, and lead was detected at levels well below New Jersey Department of Environmental Protection (NJDEP) action levels. Groundwater underlying the site is contaminated with TCE and there is a potential that contaminants may migrate to residential wells.

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March 2002

#### Clean up Approach

The site was addressed in two stages: immediate actions and a long-term remedial phase focusing on cleanup of the entire site.

#### Response Action Status ————



**Immediate Actions:** In 1985, the parties potentially responsible for the site contamination removed approximately 25,000 pounds of asphaltic sludge from soil mounds for incineration. Approximately 2,700 cubic yards of residual contaminated soil remained. Other activities completed in 1985 include installing a fence around the site and sampling waste piles. The potentially responsible parties performed on-site sampling and installed monitoring wells, under EPA oversight, beginning in 1986. In 1989, the potentially responsible parties removed soil mounds containing residual lead and TCE contaminants from the site to an approved facility.



**Entire Site:** Under EPA and NJDEP supervision, the parties potentially responsible for the site contamination conducted an investigation to determine the nature and extent of contamination at the site. In 1990, the EPA selected a remedy for cleanup of the site which includes: extraction of the contaminated groundwater from the aquifer, on-site treatment using air stripping, and discharge of the treated groundwater into the aquifer; short-term monitoring of the groundwater during the engineering design of the treatment system; long-term monitoring of the groundwater during cleanup; and installation of individual carbon adsorption treatment units at residences, if monitoring indicates that groundwater contamination threatens residential wells. The engineering design for the cleanup began in late 1991. Construction of the ground water-pump and treat remediation system was completed in August 1994. The system operated from that time until February 1996. During operation of the system, effluent from the treatment plant met the established cleanup level for TCE. Since 1990, EPA/Lenox have continued to monitor fourteen residents with drinking water wells downgradient of the site. Sampling to date has indicated that site-related contaminants have not migrated in the groundwater to threaten the residential wells.

**Site Facts:** The NJDEP sent Information Request Letters to the parties potentially responsible for site contamination in 1983 and 1984. A Unilateral Administrative Order was issued to Lenox, Inc. and Galloway Township by the EPA and the State of New Jersey. This Order required these two parties to remove contaminants from the site. In 1988, the EPA entered into an Administrative Order on Consent with Lenox, Inc. and the Township of Galloway to perform the site investigation and

evaluate the most effective cleanup methods. In 1991, the parties entered into a Consent Decree with EPA to perform site cleanup activities.

## Cleanup Progress Construction Complete



Approximately 25,000 pounds of degreasing sludge was excavated and disposed of off-site. Construction of the ground water-pump and treat remediation system began in April 1994 and was completed in August 1994. The pump and treat system consists of three extraction wells, two installed in the deep aquifer, and one in the shallow aquifer. The system extracted and treated approximately 40 gallons per minute of ground water. The treated effluent was then released in leaching pools which recharge the aquifers. The treatment system effectively treated the TCE concentration to below the required cleanup level of 1 part per billion. After 18 months of operation, the responsible parties petitioned EPA to turn off the treatment plant, because the influent groundwater entering the treatment plant was below the cleanup level of 1 part per billion of TCE. During its 2 years of operation, over 30 million gallons of contaminated groundwater were treated. After a thorough review of the data, EPA has conditionally allowed the treatment plant to remain inoperable. Groundwater monitoring data continues to be collected and reviewed. Upon further review of this data, if EPA deems it necessary for the plant to resume operations, the responsible parties will be instructed to do so. On September 14, 1999, EPA completed its Five-Year Review of the site. Based on its review. EPA found the remedy selected at the site continues to be protective of human health and the environment and recommended that long-term monitoring should continue at the site until future data indicate otherwise. Based on the groundwater data for the site, the frequency of groundwater monitoring at the site and at selected residential properties has been reduced from quarterly to semi-annually. EPA will conduct another Five-Year Review by August 2004.

### Site Repository



Atlantic County Library, Galloway Twp Branch, 30 West Jimmie Leeds Road, Pomona, N.J. 08240